



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,607	10/06/2003	Jalme Grady Jurens	200400266-1	3301

7590 06/28/2007
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

LIANG, LEONARD S

ART UNIT	PAPER NUMBER
----------	--------------

2853

MAIL DATE	DELIVERY MODE
-----------	---------------

06/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

TH

Office Action Summary	Application No.	Applicant(s)	
	10/679,607	JURRENS ET AL.	
	Examiner	Art Unit	
	Leonard S. Liang	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,6,7 and 18-20 is/are allowed.
- 6) ☒ Claim(s) 8-16 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

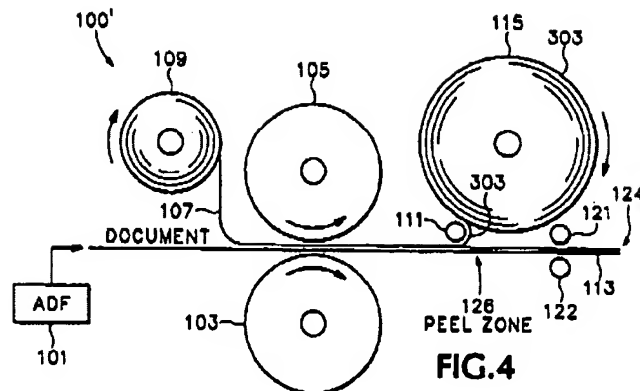
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-16, 21, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Pearson (US Pat 6089703).

Arcaro et al discloses:

- {claim 8} A device for supplying an overcoat sheet to a printed medium (figure 4); a heated roll (figure 4, reference 105); a backing roll that forms a nip with the heated roll (figure 4, reference 103); a transport mechanism that moves the printed medium through the nip and a first side of a printed medium against the heated roll (figure 4, reference 121); a supply mechanism that provides a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink (figure 4, reference 109); wherein the overcoat sheet is fused or attached to the second side of the printed medium at least in part by the heat provided from the heated roll (figure 4, reference 105); wherein the printed medium thermally contacts the heated roll only subsequent to the printed ink having been applied to the printed medium (figure 4, reference 101)



- {claim 9} wherein the heated roll alone supplies sufficient heat to fuse or attach the overcoat sheet to the second side of the printed medium (figure 4, reference 105)
- {claim 11} including a guidance mechanism that guides the printed medium's path prior to entering the nip (figure 4; inherent)
- {claim 12} wherein the printed ink associated with the second side of the printed medium is dried and the overcoat sheet is applied together in one heating step by the heated roll and the backing roll (figure 4, reference 103, 105)
- {claim 13} wherein the overcoat sheet is a thermal transfer overcoat sheet or a substantially continuous web (figure 4, reference 109)
- {claim 14} A method for applying a sheet to a printed medium (figure 4);
 providing a printed medium including a first side and a second side, an overcoat sheet, a heated roll, and a backing roll, wherein the heated roll and backing roll form a nip through which the printed medium travels (figure 4, reference 103, 105); transporting the printed medium to the nip formed between the heated roll and the backing roll such that the heated roll heats the first side of the printed

Art Unit: 2853

medium (figure 4, reference 101, 121, 122); providing a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink (figure 4, reference 107); drying the printed ink and attaching or fusing the overcoat sheet to the second side of the printed medium (figure 4, reference 103, 105); wherein the printed medium thermally contacts the heated roll only subsequent to the printed ink having been applied to the printed medium (figure 4, reference 101)

- {claim 15} including the removal of a portion of the overcoat material or sheet (figure 4, reference 126)
- {claim 21} wherein the printed medium curves around at least a portion of the heated roll before being moved through the nip (figure 4, reference 105)
- {claim 24} A device for supplying an overcoat sheet to a printed medium (figure 4); a heated roll (figure 4, reference 105); a backing roll that forms a nip with the heated roll (figure 4, reference 103); a transport mechanism that moves the printed medium through the nip and a first side of a printed medium against the heated roll (figure 4, reference 101, 121, 122); and a supply mechanism that provides a separate overcoat sheet to the second side of the printed medium at or adjacent the nip, the second side of the printed medium including printed ink (figure 4, reference 107); wherein the overcoat sheet is fused or attached to the second side of the printed medium at least in part by the heat provided from the heated roll (figure 4, reference 105); wherein the heated roll alone supplies

sufficient heat to fuse or attach the overcoat sheet to the second side of the printed medium (figure 4, reference 105)

Arcaro et al differs from the claimed invention in that it does not disclose:

- {claim 8} a first side of a printed medium facing the heated roll
- {claim 14} the first side of the printed medium facing the heated roll
- {claim 24} the first side of the printed medium facing the heated roll
- {claims 10 and 16} that the backing roll is heated or otherwise provides energy or heat.

Pearson discloses, with respect to claims 10 and 16, that the backing roll is heated (figure 1, reference 28; if the backing roll is defined as the side that does not face the printed side).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Pearson into the invention of modified Arcaro et al. The motivation for the skilled artisan in doing so is to gain the benefit of assisting in the quicker drying of the printed image, thus resulting in improved printing quality. The combination naturally suggests a first side of a printed medium facing the heated roll because the combination of Arcaro et al in view of Pearson would naturally suggest that both rollers 103 and 105 of Arcaro et al would be heated (one heated roller could be used for fusing and the other roller could be used for drying). As such, both rollers 103 and 105 could serve as both heating and backing rollers and the claimed invention would hence be met.

Art Unit: 2853

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Pearson (US Pat 6089703), as applied to claim 8 above, and further in view of Chiba et al (US Pat 4913991).

Arcaro et al, as modified teaches all limitations of the claimed invention except for the following: the heated roll is coated with a non-wetting material.

Chiba et al discloses, with respect to claim 22, that the heated roll is coated with a non-wetting material (column 5, lines 61-68).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Chiba et al into the invention of modified Arcaro et al. The motivation for the skilled artisan in doing so is to gain the benefit of protecting the roll from degradation.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arcaro et al (US Pat 6902643) in view of Pearson (US Pat 6089703), as applied to claim 8 above, and further in view of Nishikawa et al (US Pat 7086727).

Arcaro et al teaches all limitations of the claimed invention except for the following: comprising a heater or fan for applying heat to the printed medium, a position of the heater or fan being adjustable.

Nishikawa et al discloses a fan for applying heat to the printed medium, a position of the fan being adjustable (claim 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Nishikawa et al into the invention of

Art Unit: 2853

modified Arcaro et al. The motivation for the skilled artisan in doing so is to gain the benefit of assisting in the drying of the printed medium.

Allowable Subject Matter

Claims 1, 3, 6-7, and 18-20 are allowed.

Response to Arguments

Applicant's arguments filed 03/27/07 have been fully considered but they are not persuasive.

The applicant argues, "The Examiner's assertion that Pearson discloses "the backing roll is heated," as based on the interpretation, "if the backing roll is defined as the side that does not face the printed side," is in direct contradiction of the express teachings of Pearson. Pearson teaches that rolls 26 and 20, rather than roll 28, are backing rolls."

The Examiner responds by noting that Pearson is being used as a secondary reference. It does not matter if Pearson itself labels roll 28 as a backing roll; what matters is whether the roll 28 taught by Pearson could be used as a backing roll in the primary reference of Arcaro. In the context of Arcaro, the examiner defined the backing roll as a roll supporting a side that does not face the printed side of a medium. Even though Pearson did not explicitly label this type of roll as a backing roll, one of ordinary skill in the art understands that it can be a backing roll, since it's a roll on the backside of a medium that is printed on the front side. This was the teaching of Pearson that made up for the deficiencies of Arcaro. Therefore, the previous rejection is upheld.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

06/24/07
LSL LSL



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER